ATTACHMENT "B"

REDMOND FIRE DEPARTMENT

SPECIFICATIONS

FOR THE PURCHASE OF ONE

"CLASS – A" PUMPER

REVISED
January, 2010

TABLE OF CONTENTS

1.1	Chassis	Page 5
1.2	Engine	Page 5
1.3	Transmission	Page 6
1.4	Axles	Page 7
1.5	Springs	Page 7
1.6	Wheels and Tires	Page 7
1.7	Brakes	Page 8
1.8	Steering Gear	Page 9
1.9	Drive Shafts	Page 9
1.10	Cooling System	Page 10
1.11	Fuel System	Page 11
1.12	Exhaust System	Page 11
1.13	Electrical System	Page 11
1.14	Bumper	Page 14
2.1	Cab General	Page 15
2.2	Cab Doors	Page 16
2.3	Cab Glass	Page 16
2.4	Seats	Page 17
2.5	Instruments and Controls	Page 18
2.6	Cab Features	Page 20
3.1	Body General	Page 24
3.2	Compartments	Page 25
3.3	Hose Bed	Page 27
4.1	Pump Panel	Page 29
4.2	Fire Pump	Page 31
4.3	Piping	Page 31
4.4	Class A Foam System	Page 35
4.5	Booster Tank	Page 36
5.1	Lighting General Requirements	Page 37
5.2	Interior Lighting	Page 37
5.3	Exterior Lighting	Page 37
5.4	Emergency Lighting	Page 39
6.1	Master Stream Equipment	Page 41
6.2	Audible Warning Signals	Page 41
6.3	Ladders	Page 42
6.4	Other Equipment	Page 43
6.5	General	Page 43
6.6	Painting and Lettering	Page 43

TABLE OF CONTENTS (CONT.)

Options and Meetings Page 45
Appendix “A” Hosebed Layout Page 46

SPECIFICATIONS FOR A TRIPLE COMBINATION PUMPER ENGINE

INTENT OF SPECIFICATIONS

It shall be the intent of these specifications to cover the furnishing and delivery of a complete apparatus equipped as herein after specified. These specifications shall cover only the general requirements as to the type of construction and test to which the apparatus shall conform, together with certain details as to finish, equipment and appliances with which the successful bidder shall conform. Minor details of construction and materials, which are not otherwise specified, shall be left to the discretion of the manufacturer, who shall be solely responsible for the design and construction of all features. Apparatus proposed by the bidder shall meet the applicable requirements of the National Fire Protection Association (NFPA) as stated in current edition at time of contract execution. Loose equipment shall be provided only as stated in the following pages.

Each bidder shall furnish satisfactory evidence of their ability to construct the apparatus specified and shall state the location of the factory where the apparatus is to be built. The bidder shall also show that the company is in position to provide a service technician within 24 hours to service the vehicle while under warranty.

Each bid shall be accompanied by a set of "Contractor's Specifications" consisting of a detailed description of the apparatus and equipment proposed and to which the apparatus furnished under contract shall conform. These specifications shall indicate size, type, model and make of all component parts and equipment.

The bid shall be in the same order as the specification to ensure accuracy while evaluating the bids.

These specifications represent to the best of the City of Redmond’s knowledge the most complete specifications available.

QUALITY AND WORKMANSHIP

The design of the apparatus shall embody the latest approved automotive engineering practices. The workmanship shall be of the highest quality in its respective field. Construction shall be rugged and ample safety factors shall be provided to carry the loads specified and to meet both on and off road requirements and speed conditions as set forth under "Performance Tests and Requirements" section of this document. All components shall be rated for fire service use. Welding shall not be employed in the assembly of the apparatus in a manner that shall prevent the ready removal of any component part for service or repair. All steel welding shall follow American Welding Society D1.1-96 recommendations for structural steel welding. All aluminum welding shall follow American Welding Society and ANSI D1.2-96 requirements for structural welding of aluminum. Flux core arc welding to use alloy rods, type 7000, American Welding Society standards A5.20-E70T1. The manufacturer shall be required to have an American Welding Society certified welding inspector in plant during working hours to monitor weld quality.

INFORMATION REQUIRED

The manufacturer shall supply a complete set of operation and maintenance manuals covering each of the completed apparatus. A permanent plate shall be mounted in the driver's compartment of each unit which specifies the quantity and type of fluids required including

engine oil, engine coolant, transmission, pump transmission lubrication, pump primer and drive axle.

PERFORMANCE TESTS AND REQUIREMENTS

Upon delivery of the vehicle a road test shall be conducted with the apparatus fully loaded and a continuous run of fifty (50) miles or more shall be made under all driving conditions, during which time the apparatus shall show no loss of power or overheating. The transmission drive shaft or shafts, and rear axles shall run quietly and be free from abnormal vibration or noise throughout the operating range of the apparatus. The tests shall be performed by City personnel and the bidder will be notified of the results. Vehicle shall adhere to the following parameters:

A) The apparatus, when fully equipped and loaded, shall have not less than 25% or more than 50% of the weight on the front axle, and not less than 50% nor more than 75% on the rear axle. Furthermore, the weight on any axle shall not exceed 90% of the GAWR for that axle and there shall be a deviation of no more than 1000 lbs. of weight on either side of the truck unloaded. The bidder shall provide a certified weight slip or have the apparatus weighed as part of the final inspection.

B) The apparatus shall be capable of accelerating to 35 mph from a standing start within 25 seconds on a level concrete highway without exceeding the maximum governed rpm of the engine.

C) The service brakes shall be capable of stopping a fully loaded vehicle in 35 feet at 20 mph on a level concrete highway. The air brake system shall conform to Federal Motor Vehicle Safety Standards (FMVSS) 121 and NFPA 1915 section 10.3.

D) The apparatus, fully loaded, shall be capable of obtaining a speed of 61 to 64 mph on a level concrete highway with the engine not exceeding its governed rpm (full load).

E) Vehicle height shall be no greater than 11 feet 10 inches from the ground to the highest part of the completed vehicle.

F) The apparatus shall meet ALL applicable Washington State vehicle weight regulations with NFPA hose (for pumpers) and equipment loads. NO EXCEPTIONS! Failure to meet ALL Washington State vehicle weight regulations with NFPA load will result in rejection of apparatus. Bidder will have 30 days to make changes to the apparatus that will not affect performance or durability and still conform to these specifications. The City will have final approval of said changes. Any modification made to the apparatus to meet weight regulations will be at the expense of the bidder. The apparatus will be weighed during the final inspection at the manufacturer's facility or at a destination within 1 hour's driving time from the factory at the bidder's expense. The apparatus shall be weighed during tests at the City of Redmond, Fire Department with NFPA load on board to ensure compliance with Washington State weight laws within 14 days of delivery to the City.

FAILURE TO MEET TEST

In the event the apparatus fails to meet the test requirements of these specifications on the first trials, which shall occur within 30 days of delivery, second trials may be made at the option of the City within 30 days of the date of the first trials. Such trials shall be final and conclusive and failure to comply with these requirements shall be cause for rejection. Failure to comply with changes to conform to any clause of the specifications, within 30 days after notice is given to

the Supplier of such changes, shall also be cause for rejection of the apparatus. Permission to keep or store the apparatus in any building owned or occupied by the City or its use by the City during the above-specified period with the permission of the Supplier shall not constitute acceptance.

SPECIFICATION BID REQUIREMENTS

Exceptions shall be sequentially numbered. Exceptions are to state if they equal to or superior to the City's specifications. Exceptions are to be listed and fully explained on a separate page to include price impact.

Proposals taking total exceptions to the specifications shall be judged not responsive.

All exceptions shall be stated no matter how seemingly minor. Any exceptions not taken (and identified) shall be assumed by the City to be included in the proposal, regardless of the cost to the bidder.

GENERAL CONSTRUCTION

The apparatus shall be designed with due consideration to distribution of load between the front and rear axles. Weight balance and distribution shall be in accordance with the recommendations of the National Fire Protection Association.

ISO COMPLIANCE

The manufacturer shall operate a Quality Management System under the requirements of ISO 9001. These standards sponsored by the "International Organization for Standardization (ISO)" specify the quality systems that shall be established by the manufacturer for design, manufacture, installation and service. A copy of the certificate of compliance shall be included with the bid.

WARRANTY

Each piece of new fire and rescue apparatus shall be warranted to be free from defects in materials or workmanship under normal use and service. Each manufacturer shall supply, as a part of their bid package, a copy of the warranty or warranties that they propose to provide. All other warranties, as outlined in these specifications shall be provided in writing as a part of the bid package.

Failure to provide the warranties as outlined throughout these specifications may be cause for rejection of the bid. Warranties are part of the evaluation criteria.

CONSTRUCTION TIMELINE

Bidder shall furnish expected construction schedule from date of award (including testing) to completion.

(Page intentionally left blank)

1. CHASSIS

1.1 FRAME

1.1 – 1 The frame rails shall have no less than a 20 Year Warranty against cracks or failure, excluding accident or abuse.
COMPLY: O Yes O No O Exception #_____

1.1 – 2 As part of the bid the manufacturer will provide construction details of the frame materials including resistive bending moment, section modulus and yield strength. The proposal will include whether the manufacturer will utilize a frame liner.
COMPLY: O Yes O No O Exception #_____

1.1 – 3 The chassis frame shall be built with two steel channels bolted to the required number of cross members as designed to carry the specified load.
COMPLY: O Yes O No O Exception #_____

1.1 – 4 Bidder shall provide anticipated vehicle weight, axle weights and payload.
COMPLY: O Yes O No O Exception #_____
Vehicle weight - _____
Axle weights - _____
Payload - _____

TOW LOOPS & ANCHOR POINTS

1.1 – 5 Two front tow loops shall be mounted to the bumper support structure on top of the front bumper. These loops will double as a rope rescue anchor point and shall be rounded on all edges with no sharp corners and be complete loops. "Hooks" will not be accepted due to rope rescue use.
COMPLY: O Yes O No O Exception #_____

1.1 – 6 Rear towing capability shall be provided that is accessible for use as an anchor point for rope attachment and has and “eye” with rounded edges that will not damage ropes. "Hooks" will not be accepted due to rope rescue use.
COMPLY: O Yes O No O Exception #_____

1.2 ENGINE

1.2 – 1 Engine warranty shall be no less than five (5) years.
COMPLY: O Yes O No O Exception #_____

1.2 – 2 The chassis shall be powered by a Cummins ISM 500hp/1550 lb.ft. engine. The engine shall be delivered with complete diagnostic software.
COMPLY: O Yes O No O Exception #_____

LUBRICATION SYSTEM

1.2 – 3 A permanent plate shall be installed in the driver’s compartment which shall specify the quantity and type of the following fluids used in the vehicle: engine oil, engine

coolant, chassis, transmission fluid, pump transmission lubrication fluid, pump primer fluid, CAFS and drive axle lubrication fluid.
COMPLY: O Yes O No O Exception #_____

1.2 – 4 A Vogle auto lubrication system shall be installed at the factory.
COMPLY: O Yes O No O Exception #_____

AIR COMPRESSOR

1.2 – 5 A Bendix BA 921 air compressor with 15.8 CFM capacity shall be furnished.
COMPLY: O Yes O No O Exception #_____

1.2 – 6 The air compressor shall be driven off the engine. All air lines are to be plastic with compression fittings only. **NO EXCEPTIONS!**
COMPLY: O Yes O No O Exception #_____

AIR CLEANER

1.2 – 7 A dry type air cleaner with restriction indicator shall be furnished and located on the air filter housing.
COMPLY: O Yes O No O Exception #_____

1.2 – 8 Outside air shall be obtained through an ember screen on the right side of the cab.
COMPLY: O Yes O No O Exception #_____

1.2 – 9 The outside air shall pass through a water separator before it enters the air filter
COMPLY: O Yes O No O Exception #_____

1.2 – 10 The air filter shall be mounted so as to provide easy access for serviceability.
COMPLY: O Yes O No O Exception #_____

1.3 TRANSMISSION

1.3 – 1 An Allison EVS-4000, 5-speed electric push button automatic transmission with retarder shall be provided. Transmission fluid shall be the TransSynd type. Provide information on manufacturer's warranty.
COMPLY: O Yes O No O Exception #_____

1.3 – 2 Push button shift module shall be mounted to right of driver on console.
COMPLY: O Yes O No O Exception #_____

1.3 – 3 Shift position indicator shall be indirect lighted for after dark operation.
COMPLY: O Yes O No O Exception #_____

1.3 – 4 A transmission cooler shall be installed external to the radiator and have high temperature hoses. The cooler capacity shall be appropriate to the transmission specified and its intended use.

COMPLY: ○ Yes ○ No ○ Exception #_____

1.3 – 5 An electronic transmission fluid level indicator shall be provided.
COMPLY: ○ Yes ○ No ○ Exception #_____

1.4 AXLES

1.4 – 1 No less than a 250,000 mile warranty shall be provided on the axles by the manufacturer.
COMPLY: ○ Yes ○ No ○ Exception #_____

FRONT AXLE

1.4 – 2 The front axle shall be an independent type with a minimum rating of 22,800 lbs.
COMPLY: ○ Yes ○ No ○ Exception #_____

1.4 – 3 Heavy-duty telescoping shock absorbers shall also be provided on the front axle.
COMPLY: ○ Yes ○ No ○ Exception #_____

REAR AXLE

1.4 – 4 The rear axle shall be a Meritor Model RS-160 with a capacity of 24,000 pounds at the hub. The single reduction differential shall have a ratio to allow an approximate top speed of 65 mph at governed RPM.
COMPLY: ○ Yes ○ No ○ Exception #_____

1.5 SPRINGS

1.5 – 1 The front springs shall be appropriate for the suspension design and anticipated load.
COMPLY: ○ Yes ○ No ○ Exception #_____

1.5 – 2 The rear springs shall be semi-elliptical leaf constant rate type; the size and number of leafs shall be engineered for the specified load, application and axle used.
COMPLY: ○ Yes ○ No ○ Exception #_____

1.6 WHEELS & TIRES

1.6 – 1 Wheels shall be aluminum disc type, minimum 10 stud, with 11-1/4" bolt circle.
COMPLY: ○ Yes ○ No ○ Exception #_____

1.6 – 2 Front tires shall be 425/65 R22.5 Load Range J (18 PR) Bridgestone 844. Rear tires shall be 12R22.5 Load Range H (16 PR) Bridgestone M711.
COMPLY: ○ Yes ○ No ○ Exception #_____

1.6 – 3 Alloy tire chains shall be provided as follows: 1 set (2 ea.) Western Tire Chain R4255DQ-Z for the front axle and 2 sets (4 ea.) Western Tire Chain 2266 DQ-Z for the rear axle.
COMPLY: ○ Yes ○ No ○ Exception #_____

1.7 BRAKES

The front brakes shall be Meritor Wabco 434 mm EX225-H ventilated disc type. The air chambers shall be the "long stroke" type.

1.7 – 1 COMPLY: O Yes O No O Exception #_____

1.7 – 2 Rear brakes shall be a minimum of 16-1/2"x 8-5/8" S Cam ABS brakes with 30" service, and 36" long stroke spring brake chambers. Backing plates shall not be used. Brake shoes are cold bonded and riveted.
COMPLY: O Yes O No **NO Exceptions**!

1.7 – 3 All brakes shall be anti lock and diagnostic/repair software for the system shall be provided.
COMPLY: O Yes O No O Exception #_____

AIR PIPING

1.7 – 4 All air lines shall be plastic with compression fittings only. The service brake system shall be full air type. The system is to meet or exceed current FMVSS-121 requirements. An as built air piping diagram shall be provided. Other components or accessories shall be as follows:
COMPLY: O Yes O No O Exception #_____

1.7 – 5 A pressure protection valve for protection from over pressurization shall be provided.
COMPLY: O Yes O No O Exception #_____

1.7 – 6 Quick build up system,
COMPLY: O Yes O No O Exception #_____

1.7 – 7 Sealco or Bendix dual circuit brake treadle valve,
COMPLY: O Yes O No O Exception #_____

1.7 – 8 Three air reservoirs – minimum 4,270 cubic inch total,
COMPLY: O Yes O No O Exception #_____

1.7 – 9 Two air pressure gauges on cab dash, labeled "primary" and "secondary", with indicator light and buzzer,
COMPLY: O Yes O No O Exception #_____

1.7 – 10 Manual drain valves on all air reservoirs shall be end mounted; reservoirs shall be tilt mounted for ease of draining,
COMPLY: O Yes O No O Exception #_____

1.7 – 11 Manual drain valves on all air reservoirs shall be ¼ turn petcock valves; cables are not acceptable,
COMPLY: O Yes O No O Exception #_____

1.7 – 12 Meritor Wabco System Saver 1200 Plus Air Dryer
COMPLY: O Yes O No O Exception #_____

1.7 – 13 Brake piping shall consist of DOT/SAE approved reinforced nylon tubing with the DOT tags displayed.
COMPLY: O Yes O No O Exception #_____

1.7 – 14 DOT approved braided hoses shall provide flexibility between axle and frame connections.
COMPLY: O Yes O No O Exception #_____

1.7 – 15 The parking brake system is to be the spring set type operated by control valve on driver's console, and shall be capable of holding on a 20% grade forward and backward. A separate front parking brake shall be provided for parking on steep grades which shall be limited to 65 psi.
COMPLY: O Yes O No O Exception #_____

1.7 – 16 A park brake indicator light shall also be provided.
COMPLY: O Yes O No O Exception #_____

1.8 STEERING GEAR

1.8 – 1 Sheppard 110 integral heavy duty power steering with power assist cylinder shall be provided.
COMPLY: O Yes O No O Exception #_____

1.8 – 2 The Vickers V20NF hydraulic pump shall be gear driven. An electronic power steering fluid level indicator shall be provided.
COMPLY: O Yes O No O Exception #_____

1.9 DRIVE SHAFTS

1.9 – 1 Drivelines shall have a heavy-duty metal tube and be equipped with Spicer 1810 series universal joints.
COMPLY: O Yes O No O Exception #_____

1.9 – 2 The shafts shall be dynamically balanced before installation.
COMPLY: O Yes O No O Exception #_____

1.9 – 3 A splined slip joint is to be provided in each shaft.
COMPLY: O Yes O No O Exception #_____

1.10 COOLING SYSTEM

1.10 – 1 The total cooling system shall be capable of cooling the engine and transmission in high heat conditions in excess of 100 degree F ambient temperature, and shall be approved for such cooling by the engine manufacturer. An electronic coolant level indicator shall be provided. The system shall be filled with Zerex GO-5 coolant.
COMPLY: O Yes O No O Exception #_____

1.10 – 2 A tube and plate fin type radiator with removable upper and lower tanks shall be provided.
COMPLY: O Yes O No O Exception #_____

1.10 – 3 The top tank shall have a de-aeration device built in.
COMPLY: O Yes O No O Exception #_____

1.10 – 4 A drain cock shall be located at the lowest point.
COMPLY: O Yes O No O Exception #_____

1.10 – 5 Silicone hoses shall be used throughout the cooling system, including heater hoses and any hose that comes in contact with antifreeze.
COMPLY: O Yes O No O Exception #_____

1.10 – 6 An auxiliary cooler shall be provided and constructed in the radiator tank for use while pumping. It shall be constructed of copper or brass tubing and designed so that the water from the pump does not come in contact with the coolant in the radiator.
COMPLY: O Yes O No O Exception #_____

1.10 – 7 The control for the auxiliary cooler shall be on the pump operator's panel.
COMPLY: O Yes O No O Exception #_____

1.10 – 8 A coolant filter shall be provided.
COMPLY: O Yes O No O Exception #_____

1.11 FUEL SYSTEM

1.11 – 1 The vehicle shall be furnished with a minimum 60 gallon fuel tank. An access panel to the fuel tank shall be provided.
COMPLY: O Yes O No O Exception #_____

1.11 – 2 The tank shall be constructed of 12/14 gauge, hot rolled, pickled in oil steel, equipped with a swash partition and vent.
COMPLY: O Yes O No O Exception #_____

1.11 – 3 A 2" diameter fill inlet shall be located on driver's side of the body and covered with a hinged, spring loaded polished stainless steel door marked "Diesel Fuel Only".
COMPLY: O Yes O No O Exception #_____

1.11 – 4 A drain plug shall be located in the bottom of the tank.
COMPLY: O Yes O No O Exception #_____

1.11 – 5 A fuel filter with water separator and audible/visual warning devices shall be provided.
COMPLY: O Yes O No O Exception #_____

1.11 – 6 There shall be a fuel shut off valve provided between the fuel tank and primary fuel filter.
COMPLY: O Yes O No O Exception #_____

1.11-7 An electronic fuel primer and fuel cooler shall be provided.
COMPLY: O Yes O No O Exception #_____

1.12 EXHAUST SYSTEM

1.12 – 1 The exhaust shall be 5" diameter, without a downturn, and shall be at a 45 degree angle to the body and 3" beneath the lip of the running board, and shall accommodate the department's existing Niederman exhaust extraction system.
COMPLY: O Yes O No O Exception #_____

1.13 ELECTRICAL SYSTEM

1.13 – 1 The line voltage electrical system shall comply to NFPA 1901 Standards and to the applicable section of the National Electric Code #70 Standards.
COMPLY: O Yes O No O Exception #_____

1.13 – 2 Alternator shall be Leese Neville (up to 240 amps or Niehoff above 240 amps) with external voltage regulator sufficient for anticipated load plus 25%.
COMPLY: O Yes O No O Exception #_____

BATTERIES

1.13 – 3 Six (6) Deka 9A31H batteries shall be provided. They shall have threaded stud type posts.
COMPLY: O Yes O No O Exception #_____

1.13 – 4 Battery compartments shall be well ventilated and be accessible for servicing without tilting the cab.
COMPLY: O Yes O No O Exception #_____

1.13 – 5 Battery compartments are to be protected from corrosion and the batteries shall sit on Mateflex type material to provide air ventilation under them.
COMPLY: O Yes O No O Exception #_____

1.13 – 6 Heavy-duty battery cables shall be provided to withstand 125% of anticipated maximum load.
COMPLY: O Yes O No O Exception #_____

1.13 – 7 A battery on-off switch and green "battery on" pilot light shall be provided.
COMPLY: O Yes O No O Exception #_____

1.13 – 8 The pilot light shall be easily visible from the driver's position.
COMPLY: O Yes O No O Exception #_____

ELECTRICAL WIRING

1.13 – 9 All primary wiring shall run in protective loom or conduit rated for high temperature. Wiring shall be a high temperature, copper multi-strand SLX cross link coated wire or equal. All wire shall run continuously from point to point to avoid splicing. All wiring shall be of proper size for circuits utilized and shall be capable of 125% of each circuit's normal load.
COMPLY: O Yes O No O Exception #_____

1.13 – 10 All wiring shall be color, function and number coded every 3 inches for ease of service.
COMPLY: O Yes O No O Exception #_____

1.13 – 11 All connections shall be made with lugs or terminals, mechanically secured to the conductors. All circuits shall be provided with heavy duty automatic resetting circuit breakers and shall conform to SAE standards. All circuit breakers added by the apparatus builder shall be centrally located to the chassis distribution circuit breaker system for ease of service. Location so breaker panel shall be outlined in apparatus drawings provided.
COMPLY: O Yes O No O Exception #_____

1.13 – 12 All circuits, to include the ladder rack and cab raise system, shall have amperage load carried by constant duty relays and not through the switches.
COMPLY: O Yes O No O Exception #_____

1.13 – 13 All exterior exposed wire connectors shall be positive locking and treated to be environmentally sealed with treatment to withstand various extremes such as temperature, moisture and various automotive fluids. This is to include all connections in the pump module area.
COMPLY: O Yes O No O Exception #_____

1.13 – 14 All terminal plugs, connections, and light sockets shall have a corrosion prevention applied to all terminals outside the cab, body or in the pump module area. All non-waterproof connections shall utilize this treatment in the plug in order to prevent corrosion and for ease of separation.
COMPLY: O Yes O No O Exception #_____

1.13 – 15 All electrical components that are to be installed in an exterior exposed area shall be mounted in a manner to avoid the accumulation of moisture in it. Components items included but not limited to lights and switches.
COMPLY: O Yes O No O Exception #_____

1.13 – 16 All electrical components that are designed to be removed for service and maintenance shall be mounted with stainless steel screws and shall be provided with a wiring loop of 12 inches minimum to allow component to pull away from its mount and serviced.
COMPLY: O Yes O No O Exception #_____

1.13 – 17 All electrical cord or conduit shall **not** be attached to the chassis suspension components, water, fuel, air or air brake lines, fire pump piping, hydraulic lines or exhaust system components.
COMPLY: O Yes O No O Exception #_____

1.13 – 18 All wiring shall be properly shielded and separated by a minimum of 12 inches from the chassis exhaust system.
COMPLY: O Yes O No O Exception #_____

1.13 – 19 All wiring shall be supported every 24 inches of continuous run, also supported within 6 inches of any junction box. Supports shall be made of NON metallic materials or corrosion protected metal. All supports shall be of a design that does not cut or abrade the conduit or cable and shall be mechanically fastened to the apparatus.
COMPLY: O Yes O No O Exception #_____

1.13 – 20 The electrical system shall be accompanied by an As Built Wiring Diagram and load chart for the entire apparatus identifying the total load for each circuit identified and apparatus.
COMPLY: O Yes O No O Exception #_____

1.13 – 21 Provide 12 volt power for four flashlights that will reside on the back wall of the cab outboard of EMS cabinet 6 inches off the cab floor. The wiring shall be extended into the cab for ease of department installation.

COMPLY: O Yes O No O Exception #_____

INVERTER CHARGER

1.13 – 22 A Magnum MS 2812 inverter/charger shall be provided. There shall be two externally mounted duplex plugs. One each, left and right side of the cab exterior.
COMPLY: O Yes O No O Exception #_____

SHORE POWER

1.13 – 23 A shore power connection shall be externally mounted on the driver's side, above the wheel well, between the driver's door and the rear door. It shall be a standard three prong connection with an auto ejection feature. Shore power shall be on a 20 amp Kussmaul circuit and will operate the inverter system and shall be a Magnum system. The Kussmaul 091-92-12 shore power circuit shall also have a battery saver that shall provide power to the MDT and flashlight battery chargers which shall reside on the officer's side dash.
COMPLY: O Yes O No O Exception #_____

1.14 BUMPER

1.14 – 1 A heavy duty ribbed, highly polished, minimum 10" deep stainless steel bumper shall be mounted to the front of the chassis. The bumper shall have a half-moon cut out on the right side to accommodate a 5" suction port with Stortz fitting, and a center basket to accommodate 35' of 5" hose. Add an option for the hose to deploy out of an access created by the front bumper dropping forward 90 degrees thereby allowing access to the supply hose.
COMPLY: O Yes O No O Exception #_____

1.14 – 2 The bumper mount shall be of channel construction, bolted to the chassis frame.
COMPLY: O Yes O No O Exception #_____

1.14 – 3 A 3/16" aluminum diamondette gravel pan contoured to fit between the bumper and cab shall be provided.
COMPLY: O Yes O No O Exception #_____

2 CAB

2.1 GENERAL

2.1 – 1 Cab shall be 4-man style raised roof full tilt design. Provide a copy of the manufacturer's warranty for the cab.
COMPLY: O Yes O No O Exception #_____

2.1 – 2 The cab must be a "top line" cab and shall be of the open through type.
COMPLY: O Yes O No O Exception #_____

2.1 – 3 Entrance steps to the driver's and officer's positions shall be built into the cab. The distance from cab floor to step shall be NFPA compliant.
COMPLY: O Yes O No O Exception #_____

2.1 – 4 Engine coolant and windshield washer reservoirs shall be easily accessible without tilting the cab. The reservoirs shall have sight gauges allowing for visual check of fluid level.
COMPLY: O Yes O No O Exception #_____

2.1 – 5 Each rear entrance shall incorporate steps to provide ease of entrance to the crew area. Step height shall be NFPA compliant
COMPLY: O Yes O No O Exception #_____

2.1 – 6 All cab doors shall have stainless steel scuff plates on jambs to reduce damage to frames.
COMPLY: O Yes O No O Exception #_____

2.1 – 7 The interior of the cab shall be painted a light grey color (or job color which ever is less expensive).
COMPLY: O Yes O No O Exception #_____

2.1 – 8 Provide a map book cabinet to hold a minimum of four 3" 3 ring binders. The mounting location will be discussed in the preconstruction meeting.
COMPLY: O Yes O No O Exception #_____

2.1-9 The bidder shall provide no less than a 20 year/100,000 mile warranty for the cab and cab lifting system.
COMPLY: O Yes O No O Exception #_____

2.2 CAB DOORS

2.2 – 1 Cab doors are to be of such dimension that will allow firefighters easy access while in full protective gear.
COMPLY: O Yes O No O Exception #_____

2.2 – 2 Doors are to meet Federal Motor Vehicle Std. #206. Interior door handles shall be flush mounted, paddle type.
COMPLY: O Yes O No O Exception #_____

2.2 – 3 Front cab doors shall be provided with 6" wide strap style door checks and allow a minimum of 80 degree door opening.
COMPLY: O Yes O No O Exception #_____

2.2 – 4 Doors are to be hung on stainless steel full length hinges attached to cab and door by .25" stainless steel bolts.
COMPLY: O Yes O No O Exception #_____

2.2 – 5 The inside of each door shall be covered with removable panels and aluminum diamondette or stainless steel kick plates on the lower portions.
COMPLY: O Yes O No O Exception #_____

2.2 – 6 A grab handle shall be provided on the inside of each cab door.
COMPLY: O Yes O No O Exception #_____

2.3 CAB GLASS

WINDSHIELD

2.3 – 1 A windshield of tinted automotive safety plate shall be provided that provides maximum visibility.
COMPLY: O Yes O No O Exception #_____

2.3 – 2 Two-speed, electric wet arm operated windshield wipers with intermittent control shall be mounted below windshield for accessibility and optimum windshield wiping in visual areas, and shall have a minimum two (2) quart reservoir.
COMPLY: O Yes O No O Exception #_____

DOOR GLASS

2.3 – 3 Retractable tinted automotive safety type door glass shall be provided in all four (4) doors.
COMPLY: O Yes O No O Exception #_____

2.3 – 4 Door glass shall be mounted in a reinforced steel channel.
COMPLY: O Yes O No O Exception #_____

2.3 – 5 The front door glass shall provide the maximum amount of visibility.
COMPLY: O Yes O No O Exception #_____

CANOPY SIDE GLASS

2.3 – 6 Each cab side shall have one tinted automotive safety type sliding window mounted in rubber to allow maximum visibility.
COMPLY: O Yes O No O Exception #_____

2.4 SEATS

2.4 – 1 All seats shall be constructed with cleanable, blood borne pathogen resistant covering that is NFPA compliant.
COMPLY: O Yes O No O Exception #_____

2.4 – 2 The driver's seat shall be a Seats Incorporated 911 with air ride suspension.
COMPLY: O Yes O No O Exception #_____

2.4 – 3 Officer's seat shall be a Seats Incorporated 911 with air ride suspension and SCBA holder.
COMPLY: O Yes O No O Exception #_____

2.4 – 4 Manufacturer shall provide dimension of minimum headroom from the cab floor to the interior ceiling height for the raised cab.
COMPLY: O Yes O No O Exception #_____

2.4 – 5 The rear section shall contain two (2) rear facing 911 high back seats with SCBA holder and cover for SCBA.
COMPLY: O Yes O No O Exception #_____

2.4 – 6 The seating area shall be of such dimension to allow easy access for firefighters in full bunker gear.
COMPLY: O Yes O No O Exception #_____

2.4 – 7 A total of 4 seat belts and shoulder harnesses shall be furnished which shall meet Federal Motor Vehicle Standards and shall be red in color and fit firefighters in full bunker gear.
COMPLY: O Yes O No O Exception #_____

2.4 – 8 Manufacturer shall provide dimension from the top of the bench portion of all seats to the cab roof interior.
COMPLY: O Yes O No O Exception #_____

2.4 – 9 A sign visible to the driver shall be provided which shall state the number of personnel the vehicle is designed to carry.
COMPLY: O Yes O No O Exception #_____

2.4 – 10 Two (2) breathing apparatus brackets, complete with restraining straps, are to be mounted on the inside rear cab wall outboard of the EMS cabinet and above the flashlight mounting location referred to in 1.13-21.
COMPLY: O Yes O No O Exception #_____

2.5 INSTRUMENTS AND CONTROLS

2.5 – 1 The instruments shall be mounted in removable hinged panel in front of the steering column visible to the driver.
COMPLY: O Yes O No O Exception #_____

2.5 – 2 All gauges are to be electric type, Stewart Warner or VDO brand.
COMPLY: O Yes O No O Exception #_____

2.5 – 3 The main instrument panel shall include the following gauges and indicators:
COMPLY: O Yes O No O Exception #_____

GAUGES

2.5 – 4 Information centers shall be manufacturer standard or Class 1 and shall include complete apparatus information. Electric Tachometer, Engine Hour Meter, Oil Pressure, Volt meter, Water Temperature, Fuel, Electric Speedometer with Odometer, Two (2) Air Pressure Gauges marked primary and secondary, and a Transmission Temperature Gauge.
COMPLY: O Yes O No O Exception #_____

WARNING LIGHTS AND INDICATORS

2.5 – 5 Spring Brake "On", Hi-Beam, Check Engine, Stop Engine, Low Air, Battery On, and Turn Signal indicators shall be furnished. An air restriction indicator shall also be furnished.
COMPLY: O Yes O No O Exception #_____

2.5 – 6 One green indicator light shall be installed in the driving compartment which shall indicate when the pump shift has been completed and shall be labeled "Pump Engaged".
COMPLY: O Yes O No O Exception #_____

2.5 – 7 A second green indicator light shall also be provided on the pump operator’s panel.
COMPLY: O Yes O No O Exception #_____

2.5 – 8 These lights shall be energized when the pump shift has been completed, spring brake is on and the chassis transmission is engaged in pump gear.
COMPLY: O Yes O No O Exception #_____

2.5 – 9 The light in the driving compartment shall be labeled "OK to Pump".
COMPLY: O Yes O No O Exception #_____

2.5 – 10 The light on the pump panel shall be located above the throttle control and shall be labeled "Warning: Do Not Operate Throttle Unless Light is On".
COMPLY: O Yes O No O Exception #_____

2.5 – 11 An audible alarm system shall be provided for high engine temperature and low oil pressure.
COMPLY: O Yes O No O Exception #_____

CONSOLE & DASH

2.5 – 12 A label indicating over all height and width of vehicle shall be dash mounted in view of driver.
COMPLY: O Yes O No O Exception #_____

2.5 – 13 An illuminated console shall be provided to the right of the driver which shall contain the spring brake (maxi), front brake lock and transmission shift control.
COMPLY: O Yes O No O Exception #_____

2.5 – 14 A red, center dash-mounted rotary beacon indicator light shall be provided which shall indicate a cab or compartment door is open, or that the "extend-a-gun" monitor is not fully seated. (See Lighting Section 5.2 – 5 for further description.)
COMPLY: O Yes O No O Exception #_____

2.5 – 15 A flexible 18" long "gooseneck" map book light with right angle light head and red lens shall be installed on the officer's side dash.
COMPLY: O Yes O No O Exception #_____

2.5 – 16 For the safety of passengers, the cab dash shall be forward slanted, fully padded, gray in color and shall incorporate the following features:
COMPLY: O Yes O No O Exception #_____

2.5 – 17 Officer's side of dash shall be structurally supported to allow mounting of map book or computer as needed. Storage options for radios, map books and the like shall be provided.
COMPLY: O Yes O No O Exception #_____

2.5 – 18 A hinged switch panel shall be provided on top of the engine enclosure or in the overhead above the driver, and shall have a minimum of 11 rocker type switches with an integral light to indicate the switch is energized. All emergency lights shall be sequentially energized off and on.
COMPLY: O Yes O No O Exception #_____

2.5 – 19 Turn signal indicator lights shall be located to the right and left of the instrument panel with the high beam indicator light in direct center top of

instrument panel.
COMPLY: O Yes O No O Exception #_____

2.5 – 20 An engine starter button shall be mounted on the dash to the left of the steering column.
COMPLY: O Yes O No O Exception #_____

2.5 – 21 A wiper switch shall be installed in the cab dash convenient to the driver and properly illuminated. This switch shall include an "intermittent" position.
COMPLY: O Yes O No O Exception #_____

2.5 – 22 Four "cigarette lighter" power adaptors shall be provided with locations to be determined during the pre-construction conference.
COMPLY: O Yes O No O Exception #_____

HEATER/DEFROSTER & AIR CONDITIONING

2.5 – 23 A fresh air heater and defroster shall be installed with selective air flow capability divided between heat and defrost. Adjustable direction defroster outlets shall be provided for directing warm air to the windshields. Heater vents shall also be installed in the rear portion of the cab.
COMPLY: O Yes O No O Exception #_____

2.5 – 24 The cab will be equipped with dash and roof air conditioning to assist with firefighter rehabilitation.
COMPLY: O Yes O No O Exception #_____

2.5 – 25 The heating, defrost, and air conditioning systems shall be specifically designed for the cab in which they are installed complete with an integral filtration system. Furthermore, heating and cooling curves shall be provided in the bid, which show testing and certification of said systems as installed. Certification shall be by third party other than apparatus manufacturer
COMPLY: O Yes O No O Exception #_____

2.6 CAB FEATURES

2.6 – 1 Aluminum tread plate shall be provided on the cab roof.
COMPLY: O Yes O No O Exception #_____

ENGINE HOOD

2.6 – 2 The engine enclosure shall be constructed of fiberglass or aluminum and shall be lined with minimum 1" acoustical foam noise barrier insulation.
COMPLY: O Yes O No O Exception #_____

2.6 – 3 The enclosure shall be tapered from bottom to top and allow maximum room for occupants. Engine cover shall have the lowest profile possible for the engine.
COMPLY: O Yes O No O Exception #_____

2.6 – 4 The hood shall be covered with padded, sound absorbing material to reduce engine heat and noise. This surface shall be non-skid.
COMPLY: O Yes O No O Exception #_____

2.6 – 5 All routine fluid checks shall be able to be performed without having to tilt the cab.
COMPLY: O Yes O No O Exception #_____

HEADLINER & VISORS

2.6 – 6 The cab headliner shall be gray in color.
COMPLY: O Yes O No O Exception #_____

2.6 – 7 The headliner shall be removable for serviceability of upper wiring.
COMPLY: O Yes O No O Exception #_____

2.6 – 8 The headliner shall contain sound absorbing material per NFPA requirements and incorporate a water/vapor barrier on both sides.
COMPLY: O Yes O No O Exception #_____

2.6 – 9 Decibel (Db) reading in the cab shall be no greater than 86 Db when operating in normal emergency condition.
COMPLY: O Yes O No O Exception #_____

2.6 – 10 Two (2) sun visors shall be provided, one on the driver's side and one on the officer's side.
COMPLY: O Yes O No O Exception #_____

CABINETS

2.6 – 11 An EMS compartment shall be provided on the rear wall of the cab complete with two adjustable shelves and a Gortite roll up door. The minimum exterior dimensions shall be 32” wide x 52” high x 18” deep. If the compartments can be built deeper, taller or wider please provide and itemized option pricing for that at the end of the bid.
COMPLY: O Yes O No O Exception #_____

FENDERS & MOLDING

2.6 – 12 Stainless steel fenderettes with round removable aluminum inner liners shall be provided on the cab wheel wells.
COMPLY: O Yes O No O Exception #_____

2.6 – 13 A ½ - inch decorative molding shall be provided across the front and along both sides of the cab just below the windshield level between the two colors.
COMPLY: O Yes O No O Exception #_____

STEERING COLUMN

2.6 – 14 A padded steering wheel, minimum 18" in diameter, shall be provided.
COMPLY: O Yes O No O Exception #_____

2.6 – 15 The upper steering column is to be of the tilt and telescopic type.
COMPLY: O Yes O No O Exception #_____

2.6 – 16 Adjusting lever shall not interfere with any gauge or switch operation.
COMPLY: O Yes O No O Exception #_____

2.6 – 17 A self-canceling directional switch is to be mounted on the steering column with ICC four-way flash switch.
COMPLY: O Yes O No O Exception #_____

HANDRAILS

2.6 – 18 One (1) extruded aluminum handrail with a slip resistant surface for positive grip, 1.25" diameter x 18" long, shall be installed on the cab exterior, to the rear side of each cab door.
COMPLY: O Yes O No O Exception #_____

2.6 – 19 A grab handle with a slip resistant surface for positive grip shall be provided on the inside of each cab door.
COMPLY: O Yes O No O Exception #_____

MIRRORS

2.6 – 20 Two (2) Velvac 2010 mirrors 7” x 16” shall be installed, one each side of the cab, with stainless steel two-point mounting. The mirrors shall be heated and have remote controls mounted conveniently for the driver.
COMPLY: O Yes O No O Exception #_____

2.6 – 21 Mirrors shall be heated and have electric operated adjustment.
COMPLY: O Yes O No O Exception #_____

2.6 – 22 A 7" convex mirror shall be hung from the bottom of the mirror frame.
COMPLY: O Yes O No O Exception #_____

CAB TILT

2.6 – 23 The tilt cab locking system shall be a two (2) point type that locks automatically when the cab is lowered into its nested position.
COMPLY: O Yes O No O Exception #_____

2.6 – 24 Two cab lift cylinders shall be activated by an electric over hydraulic tilt system with a manual override feature.
COMPLY: O Yes O No O Exception #_____

2.6 – 25 The cab tilt system shall have an automatic locking system that engages when the cab is in the full up position. A manual release shall also be provided.
COMPLY: O Yes O No O Exception #_____

2.6 – 26 Bidder shall provide information on how their locking mechanism operates.
COMPLY: O Yes O No O Exception #_____

2.6 – 27 The cab tilt system shall be remotely controlled utilizing a push button device.
COMPLY: O Yes O No O Exception #_____

2.6 – 28 The bidder shall provide a factory built supplemental safety bar to be utilized by the shop mechanics during extended cab lift operations.
COMPLY: O Yes O No O Exception #_____

RADIO EQUIPMENT & COMPARTMENT

2.6 – 29 The department supplied 800 MHz radio shall be installed. A grounding post shall also be supplied in this compartment.
COMPLY: O Yes O No O Exception #_____

2.6 – 30 Apparatus will be supplied with David-Clark system installed at all seated positions. Final location of communication boxes will be determined at pre-production meeting.
COMPLY: O Yes O No O Exception #_____

3 BODY

3.1 GENERAL

3.1 – 1 Body and compartments shall be constructed of heavy gauge stainless steel, galvaneal steel, or aluminum materials commensurate with anticipated use and weight loads.
COMPLY: O Yes O No O Exception #_____

3.1 – 2 Aluminum diamondette catwalk shall be installed over fender cabinets extended to provide drip protection for compartments and meet NFPA guidelines.
COMPLY: O Yes O No O Exception #_____

3.1 – 3 Individual movement permitted between cab and operator stand, and operator stand and body allowing proper flexing of apparatus and eliminating undue vehicle stress.
COMPLY: O Yes O No O Exception #_____

3.1 – 4 Bidder shall base configuration and dimensions on a “Medium-Sized” body and provide detailed information on materials used in construction of body and compartments.
COMPLY: O Yes O No O Exception #_____

3.1 – 5 Tailboard area, running boards, front face of battery boxes, rear of 4-man cab, front face of operator's stand, front face of side compartments, gravel pan behind front bumper, shall be constructed of 3/16" aluminum diamondette, adequately reinforced.
COMPLY: O Yes O No O Exception #_____

3.1 – 6 Rear step shall have adequate foot space and have rounded corners.
COMPLY: O Yes O No O Exception #_____

3.1 – 7 Stainless steel fenderettes with round removable aluminum inner liners shall be provided on the body at the wheel wells.
COMPLY: O Yes O No O Exception #_____

3.1 – 8 The complete rear section of the body above the tailboard shall be covered with aluminum diamondette. This includes faces of the compartment ends. The inside portion of the hose bed shall be covered with stainless steel at the hose bed level. The front and rear face of side compartment shall be covered with aluminum diamondette.
COMPLY: O Yes O No O Exception #_____

3.1 – 9 Running boards and rear step shall be made from 12-gauge high tensile aluminum; the outer edges shall be turned down 2". They shall be set out from the body side 3/8" to prevent corroding.
COMPLY: O Yes O No O Exception #_____

3.1 – 10 Both left side and right side running boards shall have a “floating” trough/tray to accommodate short sections of hose, small appliances, and nozzles. Specifically, the right side shall securely accommodate a minimum 35’ rolled section of 5” Niedner hose with Storz couplings. NO EXCEPTIONS! THE HOSE MUST FIT AND

DEPLOY EASILY!
COMPLY: O Yes O No

HANDRAILS

3.1 – 11 Across the rear of the apparatus, below the hose bed, one (1) extruded aluminum handrail with a slip resistant surface for positive grip shall be installed.
COMPLY: O Yes O No O Exception #_____

3.1 – 12 Handrails shall be provided across rear between rear posts, vertically at rear of hose body panels and at all entrances. All handrails shall be extruded aluminum handrail with a slip resistant surface for positive grip.
COMPLY: O Yes O No O Exception #_____

3.2 COMPARTMENTS

3.2 – 1 COMPARTMENT A: One (1) compartment shall be installed ahead of the rear step, adjacent to the rear discharge ports and intake port. This compartment shall pass through to the right side rear compartment. The front of this compartment is to be removable for fuel tank access. This compartment shall have a single roll-up door, and a roll-out tray that can hold up to 500 pounds when fully rolled out.
COMPLY: O Yes O No O Exception #_____

3.2 – 2 COMPARTMENT B: Full-skirted side compartment shall be installed right and left, back of the rear wheel housings, with double doors that span full body height. The right side compartment shall open into the rear compartments.
COMPLY: O Yes O No O Exception #_____

3.2 – 3 COMPARTMENT C: A compartment shall be installed right and left ahead of the rear wheel housings and have a full height single door. The left side door shall have the hinge at the rear with the door latch on the left side. The left side compartment shall have an adjustable height, full depth, roll out tray to accommodate hose appliances.
COMPLY: O Yes O No O Exception #_____

3.2 – 4 COMPARTMENT D: On the left and right over wheel housing shall be a compartment with one (1) top hinged door on each compartment.
COMPLY: O Yes O No O Exception #_____

3.2 – 5 COMPARTMENT E: There shall be two (2) “tube-like” SCBA bottle compartments installed at the right side rear wheel well, one (1) forward of the right side rear wheel and one (1) behind the right side rear wheel that will accommodate MSA 60 minute high pressure carbon-wrapped stealth bottles. Compartment doors shall be stainless steel or aluminum and must seal out dirt and water.
COMPLY: O Yes O No O Exception #_____

3.2 – 6 COMPARTMENT F: There shall be two (2) "tube-like" SCBA bottle compartments installed at the left-side rear wheel well, one (1) forward of the left side rear wheel and one (1) behind the left side rear wheel that will accommodate MSA 60 minute high pressure carbon-wrapped stealth bottles. Compartment doors shall be stainless steel or aluminum and must seal out dirt and water.
COMPLY: O Yes O No O Exception #_____

3.2 – 7 All compartments shall be sweep-out type and supplied with red Dri-Dek or equivalent.
COMPLY: O Yes O No O Exception #_____

3.2 – 8 All compartments shall be of maximum interior space (volume) and dimension. Each bidder shall provide dimensions and useable volume for each compartment, as well as total compartment volume for the complete body.
COMPLY: O Yes O No O Exception #_____

3.2 – 9 All compartment doors shall be double pan lap type or double pan flush type and sealed against the elements.
COMPLY: O Yes O No O Exception #_____

3.2 – 10 All compartment doors shall have full length stainless steel piano hinges.
COMPLY: O Yes O No O Exception #_____

3.2 – 11 Compartments B and C shall each have two adjustable shelves (in addition to the roll-out tray described in 3.2-3). Compartment D shall have one adjustable shelve.
COMPLY: O Yes O No O Exception #_____

3.2 – 12 All compartments shall have automatic LED lights installed. Additional lights shall be installed under compartment shelves (except roll-out shelves).
COMPLY: O Yes O No O Exception #_____

3.2 – 13 Compartment doors shall have stainless steel Eberhard 106 latches and "D" handles which shall close easily with slight pressure on the doors.
COMPLY: O Yes O No O Exception #_____

3.2 – 14 All compartment doors shall have a gas charged shock hold-open device that shall prevent the compartment doors from coming in contact with one another in all states and conditions to include 25 mph wind.
COMPLY: O Yes O No O Exception #_____

3.2 – 15 Compartment A, B, C & D shall be adequately ventilated to avert sweating and for ventilation. This to include air bottle and extinguisher compartments.
COMPLY: O Yes O No O Exception #_____

3.2 – 16 Compartment E shall have a water drain hole provided.
COMPLY: O Yes O No O Exception #_____

3.2 – 17 Each compartment shall have drip moldings above each door and all doors shall have rubber seals completely around the door.
COMPLY: O Yes O No O Exception #_____

3.2 – 18 The front and rear corners of the side compartment shall be squared, and the tops shall have diamondette aluminum.
COMPLY: O Yes O No O Exception #_____

3.3 HOSE BED

3.3 – 1 Hose bed shall be configured as shown in Appendix A.
COMPLY: O Yes O No O Exception #_____

3.3 – 2 The bottom of the hose bed shall be constructed as low as possible above the tailboard. Bidder shall provide said dimension.
COMPLY: O Yes O No O Exception #_____

3.3 – 3 All aluminum flooring in hose bed shall be removable for cleaning and servicing.
COMPLY: O Yes O No O Exception #_____

3.3 – 4 A double flange shall be used on the sides and down the back of the body.
COMPLY: O Yes O No O Exception #_____

3.3 – 5 A 1/8" aluminum tread plate hose bed cover shall be provided. The cover shall be of the two (2) door type with continuous stainless steel hinges along each side. One grab handle shall be installed on the tailboard end of each cover to assist in climbing.
COMPLY: O Yes O No O Exception #_____

3.3 – 6 In lieu of the above, a retractable aluminum slat hose bed cover may be proposed.
COMPLY: O Yes O No O Exception #_____

3.3 – 7 The covers shall be assisted open and closed by gas charged cylinders.
COMPLY: O Yes O No O Exception #_____

3.3 – 8 Dome lights shall be installed on the underside of the covers and automatically turn on when the covers are opened.
COMPLY: O Yes O No O Exception #_____

3.3 – 9 When in the closed position, the cover shall be raised near the center to provide proper drainage, and shall incorporate a longitudinal channel down the center of the hose bed.
COMPLY: O Yes O No O Exception #_____

3.3 – 10 The cover shall be adequately reinforced to allow personnel to walk on it without damage.
COMPLY: ○ Yes ○ No ○ Exception #_____

3.3 – 11 A tray shall be installed under left and right side to accommodate one backboard on the left side and a Duo-Safety series 300, 9’ baby extension ladder on the right side.
COMPLY: ○ Yes ○ No ○ Exception #_____

3.3 – 12 The aluminum hose cover shall incorporate a canvas or vinyl cover that attaches by ¼-turn fasteners to cover the rear hose bed area.
COMPLY: ○ Yes ○ No ○ Exception #_____

3.3 – 13 The rear hosebed cover device and securing mechanism shall be approved at the Pre-construction meeting.

4 PUMP MODULE & BOOSTER TANK

4.1 PUMP PANEL

4.1 – 1 The entire pump operator's panel and entire right side panel shall be brushed stainless steel and employ a piano type hinge at the top of the panel for easy access to the pump.
COMPLY: O Yes O No O Exception #_____

4.1 – 2 A stainless steel bezel shall be installed around each suction and discharge port for trim and protection.
COMPLY: O Yes O No O Exception #_____

4.1 – 3 All gauges shall be liquid type. Individual discharge port gauges shall be provided and installed above the operating control valves.
COMPLY: O Yes O No O Exception #_____

4.1 – 4 The following shall be installed on the operator's panel and be well-lighted for night operation. All instruction, valve controls, drains, switches, gauges, etc., shall be marked and color coded per NFPA 1901.
COMPLY: O Yes O No O Exception #_____

4.1 – 5 Eight (8) liquid type discharge gauges, 2-1/2" ID., one for each discharge port.
COMPLY: O Yes O No O Exception #_____

4.1 – 6 Main pressure gauge 6” ID liquid type.
COMPLY: O Yes O No O Exception #_____

4.1 – 7 Main compound gauge 6" ID. liquid type.
COMPLY: O Yes O No O Exception #_____

4.1 – 8 Engine oil pressure.
COMPLY: O Yes O No O Exception #_____

4.1 – 9 Engine temperature.
COMPLY: O Yes O No O Exception #_____

4.1 – 10 UL test plugs, gated.
COMPLY: O Yes O No O Exception #_____

4.1 – 11 Class 1 ITL-40 water and foam gauges.
COMPLY: O Yes O No O Exception #_____

4.1 – 12 Air horn control button.
COMPLY: O Yes O No O Exception #_____

4.1 – 13 RPM counter for test.
COMPLY: O Yes O No O Exception #_____

4.1 – 14 Auxiliary cooler control and pump temperature gauge.
COMPLY: O Yes O No O Exception #_____

4.1 – 15 Tachometer with continuous reading of engine hours.
COMPLY: O Yes O No O Exception #_____

4.1 – 16 Centralized drain control.
COMPLY: O Yes O No O Exception #_____

4.1 – 17 Pump in gear light.
COMPLY: O Yes O No O Exception #_____

4.1 – 18 Hobbs hour meter - operates only when pump is running.
COMPLY: O Yes O No O Exception #_____

4.1 – 19 Panel lights that operate when pump engaged only.
COMPLY: O Yes O No O Exception #_____

4.1 – 20 Inlet air connector.
COMPLY: O Yes O No O Exception #_____

4.1 – 21 Outlet air connector shall be pump panel mounted.
COMPLY: O Yes O No O Exception #_____

4.1 – 22 A volt meter shall be provided on the pump panel.
COMPLY: O Yes O No O Exception #_____

4.1 – 23 A weather resistant speaker shall be flush-mounted at the top of the pump panel and have an On/Off switch. The speaker shall be wired to the back of the dash and wires tagged "Radio Speaker".
COMPLY: O Yes O No O Exception #_____

4.1 – 24 The area behind the crosslays and ahead of the main hose bed shall be used as a compartment. An aluminum slatted floor shall be provided, capable of supporting a 400-pound load. Compartment shall be not less than 18" deep. Compartment shall have framed aluminum diamondette hinged doors: one top hinged opening on the officer's side, two lift-up doors on top.
COMPLY: O Yes O No O Exception #_____

4.1 – 25 All pump panel switched shall be approved at the pre-construction meeting.
COMPLY: O Yes O No O Exception #_____

4.2 FIRE PUMP

4.2 – 1 The pump shall be capable of meeting all requirements of the Washington Surveying and Rating Bureau, UL Inc., and NFPA #1901.
COMPLY: O Yes O No O Exception #_____

4.2 – 2 Pump warranty shall be included with each bid proposal.
COMPLY: O Yes O No O Exception #_____

4.2 – 3 Fire pump shall be a single stage Hale Q-Max, 2250 GPM with 1500 GPM rating, mid-ship type with all cast housings and manifolds.
COMPLY: O Yes O No O Exception #_____

4.2 – 4 Pump impellers shall be all bronze and mounted on heavy duty ball type bearings.
COMPLY: O Yes O No O Exception #_____

4.2 – 5 Impellers shall be in dynamic and static balance to ensure vibration free operation and long packing life.
COMPLY: O Yes O No O Exception #_____

4.2 – 6 Pump case shall be easily accessed for maintenance and repair.
COMPLY: O Yes O No O Exception #_____

4.2 – 7 An electric pump shift shall be provided in the cab.
COMPLY: O Yes O No O Exception #_____

4.2 – 8 A Class 1 Total Pressure Governor Plus shall be furnished and installed and shall control the increase in pressure, to not more than 20 psi, while pumping at full capacity of 1500 GPM and all discharge lines are closed down at once. Setting control shall be on pump panel.
COMPLY: O Yes O No O Exception #_____

4.2 – 9 A site gauge shall be provided on the transfer case to allow for visual inspection of the transfer case fluid level.
COMPLY: O Yes O No O Exception #_____

4.3 PIPING

4.3-1a All piping shall be stainless steel
COMPLY: O Yes O No O Exception #_____

4.3 – 1 Piping from tank-to-pump suction shall deliver 500 GPM to the pump from the tank and shall be full flow swing-out ball valve with control valve on pump panel.
COMPLY: O Yes O No O Exception #_____

4.3 – 2 A check valve shall be installed in this suction line to eliminate tank damage when using large diameter supply line.
COMPLY: O Yes O No O Exception #_____

4.3 – 3 Tank fill line from pump discharge to tank shall be 1-1/2", 1/4 turn ball valve with control on pump panel.
COMPLY: O Yes O No O Exception #_____

4.3 – 4 One (1) bypass line 1/2" ID shall be installed between the pump and booster tank with control valve on panel side.
COMPLY: O Yes O No O Exception #_____

4.3 – 5 All plumbing on the pressure side and suction side shall be rigid with victaulic flex connections installed where necessary to avert rigidness.
COMPLY: O Yes O No O Exception #_____

4.3 – 6 All 2-1/2" outlets shall have quarter turn Elkhart #116 drain valves.
COMPLY: O Yes O No O Exception #_____

4.3 – 7 A centralized drain valve shall be installed to drain all pump parts and piping from one (1) control.
COMPLY: O Yes O No O Exception #_____

4.3 – 8 All valves used shall be full flow 1/4 turn ball valves and shall have controls extended to the left side of the apparatus within easy reach of the operator.
COMPLY: O Yes O No O Exception #_____

4.3 – 9 There shall be no greater than 25 psi friction loss between the pump and any intake or discharge port when flowing 500 gpm for 2 ½" discharges or 1250 gpm for LDH discharges. (Except pre-connect crosslays).
COMPLY: O Yes O No O Exception #_____

4.3 – 10 If any line penetrates the booster tank, victaulic couplings shall be used on each side of the tank.
COMPLY: O Yes O No O Exception #_____

PRECONNET CROSSLAYS

4.3 – 11 Two (2) 1-3/4" crosslay pre-connects shall be furnished at the front of the body directly behind the 4-man cab, one on each side. The body shall provide space for 200' of hose to lay flat in each compartment and be configured so that nozzles do not extend past the side plane of the body.
COMPLY: O Yes O No O Exception #_____

4.3 – 12 Piping from the pump to the crosslay shall be 2-1/2" to the discharges. Discharge shall extend throughout the body below the pre-connect hose bed with one (1) 1-1/2" on each side at the body. Valves shall be 2" swing-out valves 1/4 turn full flow with

all controls locking type on panel side of body.
COMPLY: O Yes O No O Exception #_____

4.3 – 13 Each 1-3/4" pre-connect shall be accessible from only one side of the body; the back side of the opposite crosslay shall be covered with the body side.
COMPLY: O Yes O No O Exception #_____

4.3 – 14 Starting at the front of the body, crosslays shall be oriented with the right side 1-3/4" crosslay forward of the left side 1-3/4".
COMPLY: O Yes O No O Exception #_____

4.3 – 15 Pre-connects shall be protected with an aluminum diamondette cover. A piano type hinge shall be used at the front of the cover. A hold-open device shall be provided.
COMPLY: O Yes O No O Exception #_____

4.3 – 16 The crosslay pre-connects shall fit behind an aluminum diamondette doors that are hinged at the forward edge of the doors and have minimum 135 deg. swing-open.
COMPLY: O Yes O No O Exception #_____

4.3 – 17 The crosslay pre-connects shall be housed in a removable plastic or aluminum tray. The tray shall be completely removable such that the pre-connects can be loaded into the tray on the ground with the tray then inserted into the body section. The trays shall "lock" into place so as not to slide out when the pre-connect is deployed.
COMPLY: O Yes O No O Exception #_____

DISCHARGE PORTS

4.3 – 18 Six (6) 2-1/2" discharge ports with 1/4 turn full flow ball valves shall be installed; two (2) located on the right side, two (2) on the left side and two (2) on the rear. All discharge gates shall be controlled from the left side of the apparatus on the operator's panel. Valves shall be installed back of the body panels with only the operating handles protruding. The valves shall have locking type handles and be hydraulic style swing valve on the pump panel.
COMPLY: O Yes O No O Exception #_____

4.3 – 19 Minimum 3" piping, with reduction to 2-1/2" at the port outlet, shall be provided for each 2-1/2" rear discharge port.
COMPLY: O Yes O No O Exception #_____

4.3 – 20 There shall be a 4" right side discharge which shall be controlled from the pump panel with an Elkhart 2940G. There shall be a 4" rear discharge controlled by an Elkhart 2940G. The 4" discharge ports shall have a 4" to 5" Stortz increaser that has a 30 degree bend down.
COMPLY: O Yes O No O Exception #_____

4.3 – 21 The 2 ½" discharge ports shall be located on the driver's side of the tailboard and "stacked" in a vertical orientation. The 5" rear discharge shall be on the officer's side.
COMPLY: O Yes O No O Exception #_____

4.3 – 22 Minimum 3" piping shall be provided for the deck mounted monitor with valve control on pump panel.
COMPLY: O Yes O No O Exception #_____

BOOSTER REEL

4.3 – 23 A booster reel shall be installed above the pump on the driver's side such that the booster line is deployed on the driver's side. The reel shall be installed as low as possible without causing interference with the pump and discharge plumbing.
COMPLY: O Yes O No O Exception #_____

4.3 – 24 The booster reel shall have an electrically operated auto reel to allow for the booster line to be reeled up. The switch for this reel shall be located on the pump panel and be clearly labeled.
COMPLY: O Yes O No O Exception #_____

4.3 – 25 The booster line shall be rubber jacketed and 200 feet in length.
COMPLY: O Yes O No O Exception #_____

4.3 – 26 Edge protectors/rollers shall be provided so that the booster line does not rub on the body or pump module when deployed or reeled up..
COMPLY: O Yes O No O Exception #_____

4.3 – 27 The nozzle attached to the booster reel shall rest in a cradle with a positive locking latch mechanism, on or near the pump panel, in such a location that it does not interfere with operations on the pump panel or deployment of the 1-3/4" pre-connect crosslay.
COMPLY: O Yes O No O Exception #_____

SUCTION PORTS

4.3 – 28 Suction ports shall be 6" ID. One (1) shall be located on each side of the pump.
COMPLY: O Yes O No O Exception #_____

4.3 – 29 One (1) gated 2-1/2" chrome plated female swivel suction with strainer and chrome plated plug cap shall be installed on each side under 6" suction port and offset so as to eliminate interference with hose connected to the 6" suction port.
COMPLY: O Yes O No O Exception #_____

4.3 – 30 A 5" pipe shall be provided at the front of the apparatus and shall terminate on the right side, front bumper. Piping will be directed straight out.
COMPLY: O Yes O No O Exception #_____

4.3 – 31 A 5" Elkhart electrically operated slow open/slow closed valve shall be installed in the 5" front suction piping.
COMPLY: O Yes O No O Exception #_____

4.4 CLASS A FOAM SYSTEM

FOAM CONCENTRATE PROPORTIONING SYSTEM

4.4 – 1 An electronic direct injection foam system shall be provided as the means for the proportioning of foam concentrate into the water stream. This system shall be capable of handling Class "A" foam concentrates.
COMPLY: O Yes O No O Exception #_____

4.4 – 2 An electronic, fully automatic, variable speed, direct injection, discharge side foam proportioning system shall be provided. The foam proportioning system operation shall be based on a direct measurement of water flows, and remain consistent within the specified flow and pressure.
COMPLY: O Yes O No O Exception #_____

4.4 – 3 The system shall be equipped with a digital electronic control display on the pump panel. Incorporated within the control display shall be a microprocessor, which receives input from the system flow meter while also monitoring the foam concentrate pump output. The microprocessor shall compare the values of the water flow versus the foam flow, to ensure the proportion rate is accurate.
COMPLY: O Yes O No O Exception #_____

4.4 – 4 One (1) paddle wheel shall be installed to monitor all foam discharges.
COMPLY: O Yes O No O Exception #_____

4.4 – 5 Push button control for the foam proportioning rate shall allow a ratio from 0.1% to 3.0% in 0.1% increments. The rated capacity of this system shall be 160 gpm at 3.0% and 1000 gpm at 0.5 %. A 5 gpm positive displacement, 3-cylinder plunger type foam pump shall be powered by a 3/4 hp 12 vdc electric motor.
COMPLY: O Yes O No O Exception #_____

4.4 – 6 One (1) check valve shall be installed in the plumbing to prevent foam from contaminating the water pump. The check valve shall be approved by the foam system manufacturer.
COMPLY: O Yes O No O Exception #_____

4.4 – 7 A tank selector control shall be mounted at the pump operator's panel.
COMPLY: O Yes O No O Exception #_____

4.4 – 8 The foam system shall be plumbed to the two (2) 1-3/4" crosslay pre-connects, the booster reel, the top 2-1/2" rear discharge and the deck gun discharge. All Class A foam discharges shall be labeled as such with consistency between the pump panel

labels and discharges.
COMPLY: O Yes O No O Exception #_____

4.5 BOOSTER TANK

4.5 – 1 Tank shall have a Life Time Warranty (minimum of 20 years).
COMPLY: O Yes O No O Exception #_____

4.5 – 2 A minimum 500 U.S. gallon capacity polypropylene water tank shall be provided. If space and GVW allow, the tank capacity shall be made as large as possible (≥ 500 gal.) without increasing wheelbase, overall vehicle length, hose bed or overall height.
COMPLY: O Yes O No O Exception #_____

4.5 – 3 Baffles shall divide the tank into separate compartments.
COMPLY: O Yes O No O Exception #_____

4.5 – 4 A fill tower shall be located at the front of the tank with an easy open non locking pressure relief cover with a stainless steel hinge. The tank fill opening shall be equipped with a strainer. An overflow and vent pipe shall be incorporated.
COMPLY: O Yes O No O Exception #_____

4.5 – 5 Tank shall incorporate a 30 gallon foam tank with fill tower on the right side. The foam cell shall not reduce the capacity of the water tank. The foam cell shall have a drain valve located inside the pump compartment accessible through a door on the passenger's side pump panel. The foam cell shall have a screen in the fill dome and a breather in the lid.
COMPLY: O Yes O No O Exception #_____

4.5 – 6 Vendor shall provide information on tank construction.
COMPLY: O Yes O No O Exception #_____

5 LIGHTING

5.1 GENERAL REQUIREMENTS

5.1 – 1 There **shall not** be a total load management system.
COMPLY: O Yes O No O Exception #_____

5.2 INTERIOR LIGHTING

There shall be four (4) overhead red/white dome lights with individual switches provided in the crew cab. Dome lights are to be on when cab doors are open. Lights are to be located over the person seated in each jump seat. No interior lights shall interfere with occupants' head clearance.
COMPLY: O Yes O No O Exception #_____

5.2 – 1 Two (2) under-the-engine hood lights shall be installed with a mercury inclination switch.
COMPLY: O Yes O No O Exception #_____

5.2 – 2 All compartments shall have automatic lights installed that operate when door is opened.
COMPLY: O Yes O No O Exception #_____

5.2 – 3 A Whelen® Model CR12MR rotating beacon (red in color) shall be installed in the interior of the cab between the driver and officer. This light shall be labeled "OPEN COMPARTMENT" and shall illuminate any time a compartment door is opened or the "extend-a gun" monitor is not fully seated, AND the maxi braked is released.
COMPLY: O Yes O No O Exception #_____

5.3 EXTERIOR LIGHTING

5.3 – 1 Exterior cab lighting shall meet or exceed Federal Department of Transportation, Federal Motor Vehicle Safety Standards, and National Fire Protection Association (NFPA) requirements in effect at time of proposal.
COMPLY: O Yes O No O Exception #_____

5.3 – 2 Front Headlights shall be halogen with chrome plated trim rings.
COMPLY: O Yes O No O Exception #_____

5.3 – 3 Five amber LED clearance and identification lights are to be installed across the leading edge of the cab, and shall not interfere with emergency lighting.
COMPLY: O Yes O No O Exception #_____

5.3 – 4 Four- (4) cornering lights shall be Whelen LED white in color:

– One- (1) each side below linear strobes on the front fender area

– One- (1) each side below linear strobes at rear wheel area

The cornering lights shall be activated when the left or right turn signal is activated. Optional switch shall be wired to allow these lights to act as side scene/ground lighting if so desired.
COMPLY: O Yes O No O Exception #_____

5.3 – 5 Qty. 2 - Whelen® Model 600 series L.E.D. turn signals (60A00TAR) shall be installed next to the above strobe lights in the same housing. Lens color to be amber.
COMPLY: O Yes O No O Exception #_____

5.3 – 6 Qty. 2 - Whelen® Model 600 series L.E.D. turn signal light heads with chrome flange shall be installed at the rear of the apparatus (60A00TAR and 6EFLANGE).
COMPLY: O Yes O No O Exception #_____

5.3 – 7 Qty. 2 - Whelen® Model 600 series L.E.D. brake/tail light heads with chrome flange shall be installed at the rear of the apparatus (60R00BRR and 6EFLANGE).
COMPLY: O Yes O No O Exception #_____

5.3 – 8 Qty. 2 - Whelen® Model 600 series LED backup light heads (60C00VCRLED).
COMPLY: O Yes O No O Exception #_____

5.3 – 9 One (1) handheld spotlight with a minimum of 500,000 candlepower shall be provided in the front of the cab easily reached by the driver or officer.
COMPLY: O Yes O No O Exception #_____

5.3 – 10 Two (2) Whelen 600 LED series lights with clear 15-degree optic lens and chrome bezel shall be mounted at the rear of the body, one each side, for rear scene lighting. These lights shall be located between the amber and red emergency lights at the rear of the body.
COMPLY: O Yes O No O Exception #_____

5.3 – 11 Rear identification lights: five red lights LED recessed into the rear step.
COMPLY: O Yes O No O Exception #_____

5.3 – 12 Rear side marker (two (2) red) LED; recessed into rubrail.
COMPLY: O Yes O No O Exception #_____

5.3 – 13 Clearance lights, front side (two (2) amber) LED.
COMPLY: O Yes O No O Exception #_____

5.3 – 14 Reflectors, rear side (two (2) red).
COMPLY: O Yes O No O Exception #_____

5.3 – 15 Reflectors, rear (two (2) red).
COMPLY: O Yes O No O Exception #_____

5.3 – 16 Two (2) work lights shall be installed on inside of beavertails and be wired with taillights for license plate.
COMPLY: O Yes O No O Exception #_____

5.3 – 17 Two (2) work lights shall be installed on front face of running board compartment, one (1) each side with control automatic when pump is engaged. There shall be no external switch on these lights.
COMPLY: O Yes O No O Exception #_____

5.3 – 18 Eight (8) water tight lights with control from the running lights shall be furnished with one (1) under each cab step, two (2) spaced equally under the rear tailboard and one (1) under each side running board below the pump panels.
COMPLY: O Yes O No O Exception #_____

5.3 – 19 Scene lighting shall be two (2) Whelen 600 series LED lights with clear 15-degree optic lens and chrome bezel. One light shall be located each side of the rear cab and be mounted on a base that is flush to the back of the cab and aimed 30 degrees off to the side of the apparatus. These lights shall be automatically operated when the pump is engaged and also from a switch at the pump panel, independent of the pump operation.
COMPLY: O Yes O No O Exception #_____

5.4 EMERGENCY LIGHTING

5.4 – 1 "Wig-wag" headlights shall be installed on the high beam headlights and be connected to the emergency lighting system through an independent rocker switch. The "wig-wag lights shall have a high beam override and shall stop operation at the activation of the parking brake.
COMPLY: O Yes O No O Exception #_____

5.4 – 2 One (1) Whelen® Freedom FN**QLED Light bar shall be installed on the apparatus. Length shall be 72" and have 6 forward facing red flashing LED lights, 2 clear forward facing flashing LED lights, 2 red corner flashing LED modules, 1 flashing red LED light on each side, 1 Opticom controller in the center front; all lenses shall be clear. Two switches shall control this light bar; one for the warning lights and one for the Opticom. The clear LED flashing lights and the Opticom emitter shall turn off when the parking brake is applied.
COMPLY: O Yes O No O Exception #_____

5.4 – 3 Qty. 2 – Welden V46W-C0HRW LED flasher with chrome flange shall be installed, one on each front bumper extension. Lens color to be clear. Light pattern shall be left unlocked.
COMPLY: O Yes O No O Exception #_____

5.4 – 4 Qty. 2 - Welden V46W-C0HRW L.E.D. flasher with chrome flange shall be installed, one on each front wheel well area/rear crew door area. Lens color to be clear. Light pattern shall be left unlocked.
COMPLY: O Yes O No O Exception #_____

5.4 – 5 Qty. 2 - Welden V46W-C0HRW LED light heads with chrome flange shall be installed, one on each side of the apparatus at the rear wheel well area. Lens color to be clear. Light pattern shall be left unlocked.
COMPLY: O Yes O No O Exception #_____

5.4 – 6 Qty. 2 - Welden V46W-C0HRW LED light heads shall be installed in the front of the apparatus in the upper chrome light cluster. Lens colors shall be clear. Light pattern shall be left unlocked.
COMPLY: O Yes O No O Exception #_____

5.4 – 7 Qty. 2 - Whelen® Super 600 LED light heads with chrome flange shall be installed at the rear of the apparatus in the upper zone. Lens color to be amber.
COMPLY: O Yes O No O Exception #_____

5.4 – 8 Qty. 2 - Whelen® Super 600 LED light heads with chrome flange shall be installed at the rear of the apparatus. Lens colors to be red for lower zone lighting.
COMPLY: O Yes O No O Exception #_____

5.4 – 9 The linear strobes specified in sections 5.4 – 6 and 5.4 – 7 shall illuminate so as to create an alternating “X” pattern.
COMPLY: O Yes O No O Exception #_____

5.4 – 10 Qty. 2 - Whelen® Model L31HRFN shall be installed at the rear of the apparatus on top of the compartments. Lens colors shall be red.
COMPLY: O Yes O No O Exception #_____

6 EQUIPMENT

6.1 MASTER STREAM EQUIPMENT

6.1 – 1 Task Force Tips Crossfire combination pack (Model XFC-52)
COMPLY: O Yes O No O Exception #_____

6.1 – 2 Task Force Tips Crossfire monitor top (Model XFT-NJ)
COMPLY: O Yes O No O Exception #_____

6.1 – 3 Task Force Tips 2-1/2" Quad stacked master deluge tips (Model MST-4NJ)
COMPLY: O Yes O No O Exception #_____

6.1 – 4 Task Force Tips 10" Stream Straightener (Model XF-SS10)
COMPLY: O Yes O No O Exception #_____

6.1 – 5 Task Force Tips mounting bracket (Model XF-B)
COMPLY: O Yes O No O Exception #_____

6.2 AUDIBLE WARNING SIGNALS

6.2 – 1 One (1) Federal Model EQ-2-B siren shall be furnished and installed in the left side of the bumper, with a rubber gasket. The amplifier shall be placed in the cab.
COMPLY: O Yes O No O Exception #_____

6.2 – 2 The EQ-2-B siren shall be operated by either of two (2) floorboard switches. One (1) shall be used by the driver and one (1) shall be used by the officer.
COMPLY: O Yes O No O Exception #_____

6.2 – 3 A siren "brake" feature shall be installed in the cab area accessible to both driver and officer. Department to specify exact installation location of siren and switches.
COMPLY: O Yes O No O Exception #_____

6.2 – 4 One (1) Grover 1510 stutter tone air horn shall be recessed in right front bumper with rubber gasket and have a minimum 1200 cubic inch reservoir.
COMPLY: O Yes O No O Exception #_____

6.2 – 5 The air horn shall be operated by either of two (2) floorboard switches. One (1) shall be used by the driver and one (1) shall be used by the officer. These switches are to be located next to the siren switches.
COMPLY: O Yes O No O Exception #_____

6.2 – 6 Two (2) rear tailboard signal systems shall be installed on left and right side of the hose bed with waterproof button in rear and connected to an audible buzzer in the

cab.
COMPLY: O Yes O No O Exception #_____

6.2 – 7 One (1) Warn-A-Larm Model 210303 "Evacuator 97" or equal, having a 110 decibel rating shall be furnished and installed under the tailboard with control through the back-up light system.
COMPLY: O Yes O No O Exception #_____

6.2 – 8 One (1) Whelen® Model 295HFSQ1, Hands free Siren Amplifier, Silent Siren test and Speaker test option, siren shall also incorporate a HI/LO function.
COMPLY: O Yes O No O Exception #_____

6.2 – 9 Two (2) 100 watt Whelen model SA-122-FM siren speakers shall be recessed mounted in the left side of the front bumper.
COMPLY: O Yes O No O Exception #_____

6.3 LADDERS

A hydraulic tow point attachment ladder rack shall be provided to carry the ladders listed below (with the exception of the Series 300) and pike pole. The ladder rack shall not block the view of any warning light.

6.3 – 1 COMPLY: O Yes O No O Exception #_____

6.3 – 2 One (1) Duo-Safety Series 1225-A, 35', 3-section aluminum ladder shall be furnished and installed.
COMPLY: O Yes O No O Exception #_____

6.3 – 3 One (1) Duo-Safety series 775-A, 14' aluminum roof ladder shall be furnished and installed.
COMPLY: O Yes O No O Exception #_____

6.3 – 4 One (1) Duo-Safety 585-A, 10' folding ladder shall be furnished and installed.
COMPLY: O Yes O No O Exception #_____

6.3 – 5 One (1) Duo-Safety Series 300 9' baby extension ladder shall be furnished and installed under the hose bed cover.
COMPLY: O Yes O No O Exception #_____

6.3 – 6 One (1) Duo-Safety fiberglass 12' pike pole shall be furnished and installed.
COMPLY: O Yes O No O Exception #_____

6.4 OTHER EQUIPMENT

6.4 – 1 Bidder shall install three radio antennae bases on the top of the cab.
COMPLY: O Yes O No O Exception #_____

6.4 – 2 Six (6) folding steps compliant with NFPA 1901 shall be mounted at locations to be determined at the mid construction inspection.
COMPLY: O Yes O No O Exception #_____

6.4 – 3 Two "Quick Choc" wheel chocks (part number of 3025-144-000 and an SQCH-44-H folding choc holder, part number 3025-205-000) shall be installed in a slide in slide out rack located one (1) in front of the left rear wheel under the running board and one (1) aft of the left rear wheel under the running board.
COMPLY: O Yes O No O Exception #_____

6.4 – 4 Electronic diagnostic media for all components, where said media is available, shall be provided.
COMPLY: O Yes O No O Exception #_____

6.5 GENERAL

6.5 – 1 Any and all hinges, brackets, grab rails, or decorative trim shall be installed with bolts and/or screws per NFPA requirements. Where not specifically addressed by NFPA standards, said items shall be installed with stainless steel bolts or screws.
COMPLY: O Yes O No O Exception #_____

6.5 – 2 The specification for aluminum diamondette tread plate is used throughout these specifications. In all locations where this tread plate will be used as a stepping surface the following shall apply: Embossed Tread Plate shall be used on all stepping surfaces to include tailboard, running boards, steps, catwalks, hose bed covers and top of cab. All other non-stepping surface tread plate shall be Polished Aluminum Diamondette Tread Plate.
COMPLY: O Yes O No O Exception #_____

6.5 – 3 All filters within the apparatus shall be easily accessed for service.
COMPLY: O Yes O No O Exception #_____

6.6 PAINTING AND LETTERING

6.6 – 1 All raw body materials and other parts shall be thoroughly cleaned under pressure before any painting is done.
COMPLY: O Yes O No O Exception #_____

6.6 – 2 All concealed parts shall be painted before assembly.
COMPLY: O Yes O No O Exception #_____

6.6 – 3 DuPont Corlar epoxy primer or equal shall be used.
COMPLY: O Yes O No O Exception #_____

6.6 – 4 On this smooth base shall be sprayed two (2) coats of Red DuPont "Imron" polyurethane 660UH red enamel, or equal – color matching.
COMPLY: O Yes O No O Exception #_____

6.6 – 5 Top of cab shall be painted white "Imron" 817U enamel, or equal – color matching. The diamond plate shall not be painted.
COMPLY: O Yes O No O Exception #_____

6.6 – 6 All painted surfaces shall be free from orange peel, drips, sags, fish eyes and thin spots.
COMPLY: O Yes O No O Exception #_____

6.6 – 7 The inside of compartments shall be painted with a material that shall resist chipping and rusting.
COMPLY: O Yes O No O Exception #_____

6.6 – 8 The complete underside of the apparatus shall be painted the same as the body exterior.
COMPLY: O Yes O No O Exception #_____

6.6 – 9 Undercoat cab prior to installation on frame.
COMPLY: O Yes O No O Exception #_____

6.6 – 10 Custom lettering and graphics shall be applied in accordance with department specifications.
COMPLY: O Yes O No O Exception #_____

6.6 – 11 All paint and lettering shall have a 7 year/70,000 mile warranty.
COMPLY: O Yes O No O Exception #_____

6.7 OPTIONS:

6.7-1 Back up camera.

6.7-2 Provide price for pressure gauge/flow meters in place of discharge pressure gauges. (Class 1 Flowminder Value System)

6.7-3 Provide price for Elkhart EBEC 1, 2 and 3 valve control devices and E1F valve actuator for each discharge.

6.7-4 Rope rescue anchor points on the sides of the engine. One per side, in accordance with NFPA standards.

6.7-5 10 year engine warranty

6.7-6 5 year fire pump warranty

6.7-7 3 year bumper to bumper warranty not to include expendables

Proposed Meetings:

- Pre-bid meeting at City of Redmond
- Kick-off/Pre-production Meeting at City of Redmond
- Production meeting – Mid Construction at awardee's facility
- Final Inspection at awardee's facility
- Delivery and Inspection at City of Redmond
- Acceptance Testing at City of Redmond

Appendix A

REDMOND FIRE HOSE BED LAYOUT

For information

Photo will be presented at Pre-Bid Meeting